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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/123,614	07/28/1998	LEE M. MIDDLEMAN	12032	5740

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DAVID A. FARAH, M.D.
SHELDON & MAK
225 SOUTH LAKE AVENUE 9TH FLOOR
PASADENA, CA 91101

EXAMINER

RODRIGUEZ, CRIS LOIREN

ART UNIT	PAPER NUMBER
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3763

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/123,614

Applicant(s)

MIDDLEMAN ET AL. *CH*

Examiner

Cris L. Rodriguez

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-11,22 and 24-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11,22 and 24-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, 11, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Cathcart et al (US 5,681,347).

permanently
Cathcart discloses a device 10 comprising a tubular element 13 comprising a hollow tubular lumen, a deployment element 17, and a plurality of resilient anchoring members 24 attached to the distal end of the inner lumen as claimed. Please note that the word "attached" means to join or connect. The word join is being used as "to put into close association or relationship" according to the Webster's II dictionary.

4. Claims 1, 2, 7, 10, 11, and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Goldberg et al (US 5,152,777).

Goldberg discloses a device having a tubular element 70,72,74 with a hollow tubular lumen, a deployment element 60,90,92 (also considered as the guide wire

lumen 62

set forth in claims 7, 40 and 50), and a plurality of resilient anchoring members 32A-32F as claimed. The collar is reference numeral 38.

5. Claims 38-40, 44 and 45 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hayashi (5,910,144).

Hayashi discloses a prosthesis gripping system comprising a tubular element 20,26 comprising a hollow tubular lumen, a deployment element 50 (the guide wire set forth in claims 7, 40 and 50 is reference numeral 36), and a plurality of resilient anchoring members 40 as claimed. The collar is reference numeral 50.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over et al Cathcart et al in view of Hayman et al (5,267,960) and Abrams (5,492,119).

Cathcart discloses the invention substantially as claimed. However, Cathcart fails to disclose the anchoring members comprising spring steel or a pseudo elastic material such as nickel titanium alloy.

Hayman teaches an anchor 19 having arms 21 made of spring steel, and Abrams teaches a catheter apparatus comprising control wires having curved feet made of nitinol, which is a pseudo elastic material for anchoring purposes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cathcart et al by providing the anchoring members with the materials

of Abrams and Hayman as taught old and well known in the art for anchoring purposes.

8. Claims 8, 9, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. in view of Abrams.

Goldberg discloses the invention substantially as claimed as discussed above. However, Goldberg fails to disclose the anchoring members being of a pseudo elastic material such as nickel titanium alloy, or the anchoring members having an oval cross-section.

Abrams teaches a catheter apparatus comprising control wires having curved feet for anchoring purposes, made of nitinol, which is a pseudo elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg by providing the anchoring members with the materials of Abrams as taught old and well known in the art for anchoring purposes. Also, the oval cross-section is an obvious variation from the circular cross-section.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al in view of Lefebvre (US 5,938,683).

Goldberg discloses the invention substantially as claimed as discussed above. However, Goldberg fails to disclose the anchoring members having a substantially flat top portion.

Lefebvre teaches a filter (anchoring member) comprising a substantially flat top portion for anchoring in a blood vessel (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg by providing the anchoring members with the substantially flat top

portion as shown by Lefebvre to anchor the anchoring members to the passageway of a blood vessel and as an obvious design alternative.

10. Claims 24, 25, 28-30, and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al in view of Hayashi.

Goldberg discloses a device having a tubular element 70,72,74 with a hollow tubular lumen, a deployment element 60,90,92 (also considered as the guide wire set forth in claims 7, 40 and 50), and a plurality of resilient anchoring members 32A-32F as claimed. The collar is reference numeral 38. However, Goldberg fails to disclose the anchoring members being attached within the wall of the deployment means inner lumen, or attached to the inner surface of the wall of the deployment means inner lumen, and the anchoring members having a substantially oval cross-section.

Hayashi teaches a device with anchoring members 40 being attached to the inner surface of the wall of the deployment element 50 inner lumen. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg by attaching the anchoring members to the inner surface of the wall of the deployment element inner lumen as taught old and well known by Hayashi as an alternative design of connection between two segments. Since Applicant's disclosure lacks criticality for attaching the anchoring members within the wall of the deployment means, the Examiner has considered this feature as a mere modification or variation from Goldberg (over the outer surface of the deployment means) and Hayashi (in the inside surface of the deployment means) connections. Also, the oval cross-section is an obvious variation from the circular cross-section.

11. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg in view of Hayashi as applied to claim 28 above, and further in view of Abrams.

Goldberg/Hayashi discloses the invention substantially as claimed as discussed above. However, Goldberg/Hayashi fails to disclose the anchoring members comprising a pseudo elastic material such as nickel titanium alloy.

Abrams teaches a catheter apparatus comprising control wires having curved feet made of nitinol, which is a pseudo elastic material for anchoring purposes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg in view of Hayashi by providing the anchoring members with the materials of Abrams as taught old and well known in the art for anchoring purposes.

12. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al in view of Hayashi as applied to claim 28 above, and further in view of Lefebvre.

Goldberg/Hayashi discloses the invention substantially as claimed as discussed supra. However, Goldberg/Hayashi fails disclose the anchoring members having a substantially flat top portion.

Lefebvre teaches a filter (anchoring member) having a substantially flat top portion for anchoring purposes in a blood vessel (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg/Hayashi by providing the anchoring members with the substantially flat top portion of Lefebvre to anchor the anchoring members to the passageway of a blood vessel and as an obvious design alternative.

13. Claims 41- 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Abrams and Hayman et al.

Hayashi discloses the invention substantially as claimed as discussed above. However, Hayashi fails to disclose the anchoring members being of a pseudo elastic material such as nickel titanium alloy or made of spring steel, or the anchoring members having a substantially oval cross-section.

Abrams teaches a catheter apparatus having control wires having curved feet made of nitinol, which is a pseudo elastic material, and Hayman teaches an anchor 19 having arms 21 made of spring steel for anchoring purposes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hayashi by providing the anchoring members with the materials of Abrams and Hayman as taught old and well known in the art for anchoring purposes. Also, the oval cross-section is an obvious variation from the circular-cross section.

14. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Lefebvre.

Hayashi discloses the invention substantially as claimed as discussed above. However, Hayashi fails to disclose the anchoring members having a substantially flat top portion.

Lefebvre teaches a filter (anchoring member) having a substantially flat top portion for anchoring purposes in a blood vessel (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hayashi by providing the anchoring members with the substantially flat top portion of Lefebvre to anchor the anchoring members to the passageway of a blood vessel and as an obvious design alternative.

Response to Arguments

15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant is being narrower than the claims. In regards to Applicants arguments that Cathcart does not have the bore of the inner lumen extending completely through the inner lumen from the proximal to the distal end, this is not found persuasive because in column 6 lines 26-38 of the reference set forth that the tube is hollow from proximal to distal end. In Cathcart, figures 2-5, it is shown that the deployment element 17 is "reversibly movable" as applicants description in claim 1: "each anchoring member being reversibly movable by the deployment element between a first position and a second position, where in the first position, at least a portion of each anchoring member is retracted within the outer lumen," (see figures 2-4 of Cathcart), "...and where in the second position, at least a portion of each anchoring member is deployed exteriorly to the outer lumen," (see figure 5 of Cathcart), "...so as to engage the inner surface of the mammalian passageway and anchor the tubular element in the passageway." Therefore, Cathcart discloses the first and second position as claimed. The references contain all the elements as claimed.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cris L. Rodriguez whose telephone number is (703) 308-2194. The examiner can normally be reached on Monday-Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, Brian Casler can be reached on (703) 308-3552. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


Cris L. Rodriguez

July 11, 2002


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700